# RECEIVED CENTRAL FAX CENTER JUL 2 2 2010

Application No. 10/544093 Amendment dated July 22, 2010 Reply to Office Action of January 22, 2010 PATENT

#### Amendments to the Claims:

Please amend claims 106 and 121. This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

1-102. (Canceled)

- 103. (Previously Presented) A fragment of amyloid-β (Aβ), the amino acid sequence of which consists of KLVFFAED (residues 16-23 of SEQ ID NO:1), wherein the fragment is linked to a carrier molecule to form a conjugate which helps elicit an immune response against the fragment.
  - 104. (Canceled)
- 105. (Previously Presented) The fragment of claim 103, wherein multiple copies of the fragment are linked to a single copy of the carrier.
- 106. (Currently Amended) The fragment of claim 103, wherein a single copy of the fragment are is linked to multiple copies of the carrier.
- 107. (Previously Presented) The fragment of claim 103, wherein the fragment is linked to the carrier through a spacer.
- 108. (Previously Presented) The fragment of claim 103, wherein the fragment is linked to the carrier by chemical crosslinking.
- 109. (Previously Presented) The fragment of claim 103, wherein the carrier is a heterologous polypeptide.

Application No. 10/544093 Amendment dated July 22, 2010 Reply to Office Action of January 22, 2010 **PATENT** 

- 110. (Previously Presented) The fragment of claim 109, wherein the heterologous polypeptide comprises the amino acid sequence QYIKANSKFIGITEL (SEQ ID NO:8).
- 111. (Previously Presented) The fragment of claim 109, wherein the heterologous polypeptide comprises the amino acid sequence AKXVAAWTLKAAA (SEQ ID NO:11).
- 112. (Previously Presented) The fragment of claim 103, wherein the carrier is a diphtheria toxoid.
- 113. (Previously Presented) The fragment of claim 103, further comprising a pharmaceutically acceptable vehicle.

## 114-117. (Canceled)

118. (Previously Presented) A pharmaceutical composition comprising a fragment of amyloid- $\beta$  (A $\beta$ ), the amino acid sequence of which consists of KLVFFAED (residues 16-23 of SEQ ID NO:1) and a pharmaceutically acceptable vehicle, wherein the fragment is linked to a carrier molecule to form a conjugate which helps elicit an immune response against the fragment.

#### 119. (Canceled)

- 120. (Previously Presented) The composition of claim 118, wherein multiple copies of the fragment are linked to a single copy of the carrier.
- 121. (Currently Amended) The composition of claim 118, wherein a single copy of the fragment are is linked to multiple copies of the carrier.
- 122. (Previously Presented) The composition of claim 118, wherein the fragment is linked to the carrier through a spacer.

Application No. 10/544093 Amendment dated July 22, 2010 Reply to Office Action of January 22, 2010 **PATENT** 

- 123. (Previously Presented) The composition of claim 118, wherein the fragment is linked to the carrier by chemical crosslinking.
- 124. (Previously Presented) The composition of claim 118, wherein the carrier is a heterologous polypeptide.
- 125. (Previously Presented) The composition of claim 124, wherein the heterologous polypeptide comprises the amino acid sequence QYIKANSKFIGITEL (SEQ ID NO:8).
- 126. (Previously Presented) The composition of claim 124, wherein the heterologous polypeptide comprises the amino acid sequence AKXVAAWTLKAAA (SEQ ID NO:11).
- 127. (Previously Presented) The composition of claim 118, wherein the carrier is a diphtheria toxoid.
- 128. (Withdrawn) The composition of claim 118, further comprising an N-terminal  $A\beta$  fragment.
- 129. (Withdrawn) The composition of claim 128, wherein the N-terminal fragment is  $A\beta 1-5$ .
- 130. (Withdrawn) The composition of claim 128, wherein the N-terminal fragment is Aβ1-6.
- 131. (Withdrawn) The composition of claim 128, wherein the N-terminal fragment is A\u03b31-7.
- 132. (Previously Presented) The composition of claim 118, further comprising an adjuvant.

Application No. 10/544093 Amendment dated July 22, 2010 Reply to Office Action of January 22, 2010 **PATENT** 

- 133. (Previously Presented) The composition of claim 132, wherein the adjuvant is alum.
- 134. (Previously Presented) The composition of claim 132, wherein the adjuvant is MPL.
- 135. (Previously Presented) The composition of claim 132, wherein the adjuvant is QS-21.
- 136. (Previously Presented) The composition of claim 132, wherein the adjuvant is RC-529.
- 137. (Previously Presented) The composition of claim 118, further comprising a surfactant.
- 138. (Previously Presented) A vial comprising a pharmaceutical composition comprising a fragment of amyloid-β (Aβ), the amino acid sequence of which consists KLVFFAED (residues 16-23 of SEQ ID NO:1) in a pharmaceutically acceptable vehicle, and an adjuvant.
- 139. (Withdrawn) A method of prophylaxis of a disease associated with amyloid deposits of  $A\beta$  in the brain of a patient susceptible to the disease, comprising administering to the patient an effective regime of a fragment of amyloid- $\beta$  (A $\beta$ ), the amino acid sequence of which consists of KLVFFAED (residues 16-23 of SEQ ID NO:1), and thereby effect prophylaxis of the disease.
- 140. (Withdrawn) A method of treating a disease associated with amyloid deposits of  $A\beta$  in the brain of a patient susceptible to the disease, comprising administering to the patient an effective regime of fragment of amyloid- $\beta$  (A $\beta$ ), the amino acid sequence of which consists of KLVFFAED (residues 16-23 of SEQ ID NO:1), and thereby treat the disease.